FUCHS, E.; FRANJKOVIC, Krunoslav, inz. [translator] (Zagreb)

Quality of welding. Zavarivanje 4 no.2:37-42 F '61.

1. "Poljomontaza", Zagreb (for Frnajkovic).

FUCHS, Erik

Thermally caused dimensional changes in current conductors used in vacuum technics. Koh lap 95 no.6:261-263 Je '62.

1. Vasipari Kutato Intezet, Budapest.

FUCHS, Erik, a muszaki tudomanyok kandidatusa

Determination of the lattice distortion of corundum powder by means of X-ray diffraction. Koh lap 96 no.4:150-153 Ap '63.

1. Vasipari Kutato Intezet, Budapest.

FUCHS, Erik, dr.; NEUBAUER, Iren

Lattice distortion determination of polycrystalline materials by X-ray diffraction. Meres automat 12 no.10:307-314 '64.

1. Iron Industry Research Institute, Budapest.

SZANTO, Istvan, a muszaki tudomanyok kandidatusa, tudomanyos fomunkatars; FUCHS, Erik, a muszaki tudomanyok kandidatusa, tudomanyos munkatars

Up-to-date work organization in research institutes of natural science and technology with heterogeneous tasks. Magy tud 71 no.11:699-704 N '64.

1. Research Institute of Technical Physics, Hungarian Academy of Sciences, Budapest (for Szanto). 2. Iron Industry Research Institute, Budapest (for Fuchs).

FUCHS, E.G.

Chemical composition of FeNi alloys unsed for so-called Dumet wires and their thermal dimensional changes. Acta techn Hung 31 no.3/4: 425-435 '60. (EEAI 10:4)

1. Eisenforschunginstitut, Budapest.
(Iron-nickel alloys) (Electron tubes)

FUCHS, E.G.

Heat-caused dilatation of copper-clad iron-nickel current-carrying wires for vacuum engineering. Acta techn Hung 32 no.1/2:53-63 '61. (EEAI 10:5)

1. Eisenforschunginstitut, Budapest.
(Electric wire) (Vacuum) (Copper)
(Iron) (Nickel)

FUCHS, E.G. Kandidat der technischen Wissenschaften

X-ray diffractometric determination of lattice distortion in brittle crystal powders. Acta techn Hung 48 no.3/4:273-285 '64.

FUCHS, H.

FUCHS, H. Investigation of the frequency of the dimensions of nummulites (Camerinidae). p.466.

Vol. 85, no. 4, Oct./Dec. 1955.
FOLDTANI KOZLONY. BULLETIN OF THE HUNGARIAN GEOLOGICAL SOCIETY.
GEOGRAPHY & GEOLOGY
Budapest, Hungary

So: East Europeon Accessions, Vol. 5, no. 5, May 1956

FUCHS, H.

Paleodyction from Middle Miocene sediments in Transylvania. p. 299. FOLDTANI KOZLONY. BULLETIN OF THE HUNGARIAN GEOLOGICAL SOCIETY. (Magyar Foldtani Tarsulat) Budapest. Vol. 86, no. 3, July/Aug. 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 5, No. 12, December 1956.

FUCHS, H.

Siren finding from Transylvania. p. 326.

FOLDTANI KOZLONY. BULLETIN OF THE HUNGARIAN GEOLOGICAL SOCIETY.

(Magyar Foldtani Tarsulat) Budapest, Hungary. Vol. 89, No. 3, July/Sept. 1959

Monthly List of East European Accessions, (EEAI) LC, Vol. 9, No. 1, Jan. 1960

Uncl

FUCHS, H., inz. dypl. (Berlin)

Photoelectric compensation, its principles and measuring range. Pomiary 10 no. 1: 29-30 Ja '64.

FUCHS, Herman

Study of the ontogenetic development of some species of Pliocene molluska. Pt. 2. Studia Univ B-B S. Geol-Geog 7 no.1:53-61 '62.

1. "Victor Babes" es a "Bolyai" Tudomanyegyetem, todomanyos ulesszakan.

MIRON, Radu, conf. univ.; NEGREI, Veronica; MANOLIU, Lucia; POLIZU, Lucia; VISA, Eugen; HAIVAS, M.; GLIGOR, I.; FUCHS, I.; ZOICAN, Voicu; BAGHINA, V., prof.; HADIRCA-BREAZA, I.; IVANESCU-TIRGOVISTE, C.; NEGREA, M.; SPIRIDON, I.; SZABO-PLOIESTI, T.; GRIGORE-PLOIESTI, I., prof; BAZACOV, Gh., prof.; PAUNESCU, Al.; MORARU, I.; SAHAGIA, C.; UDREA, V., prof. (Galati); NIMITAN, I. (Suceava)

Observations on the Analytic Geometry Manual for the 11th grade. Gaz mat fiz 15 no.6:298-321 Je '63.

1. Societatea de Stiinte Matematice si Fizice, Filiala Iasi (for Miron). 2. Societatea de Stiinte Matematice si Fizice, Filiala Craiova (for Negrei, Manoliu, Polizu). 3. Societatea de Stiinte Matematice si Fizice, Filiala Timisoara (for Visa, Haivas, Gligor, Fuchs). 4. Societatea de Stiinte Matematice si Fizice, Subfiliala Petroseni (for Zoican). 5. Societatea de Stiinte Matematice si Fizice, Filiala Ploiesti (for Baghina, Hadirca-Breaza, Ivanescu-Tirgoviste, Negrea, Spiridon, Azabo-Ploiesti, Grigore-Ploiesti). 6. Societatea de Stiinte Matematice si Fizice, Subfiliala Tg. Severin (for Bazacov, Paunescu, Moraru, Sahagia).

FUCHS, I.

Public debate about Dr. Endre Makai's dissertation. p. 509. Vol 5, no. 4, 1955.
KOZLEMENYEI. Budapest, Hungary.

So: Eastern European Accession. Vol 5, no. 4, April 1956

FUCHS, Jan; BURSA, Vaclav

Thirty years of paper container production in Susice. Papir a celulosa 19 no. 1:29-30 Ja '64.

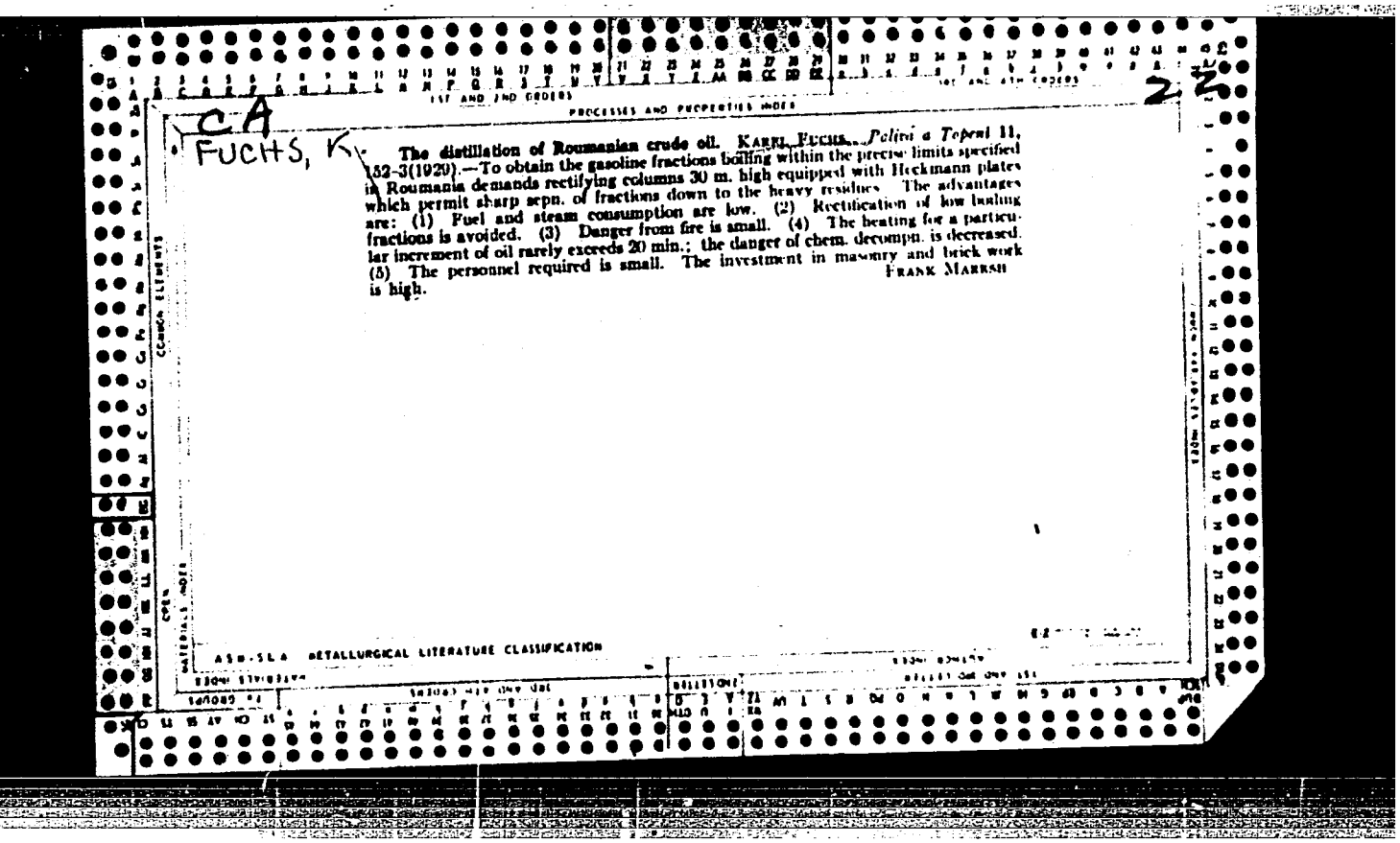
1. Zapadoceske papirny, zavod PAP, Susice.

DECEASED PER ANALYST.

FUCHS, Jiri, inz.

Problems of using high-strength steel for steel structures. Zvar sbor 10 no.1:87-99 '61.

1. Hutni projekt, Ostrava.



CA

FUCHS, K.

PROCESSES AND PROPERTIES INDEX

The distillation of Roumanian crude oil. KAREL FUCHS. *Petrol a Topeni* II, 152-3(1929).—To obtain the gasoline fractions boiling within the precise limits specified in Roumania demands rectifying columns 30 m. high equipped with Heckmann plates which permit sharp sepn. of fractions down to the heavy residues. The advantages are: (1) Fuel and steam consumption are low. (2) Rectification of low boiling fractions is avoided. (3) Danger from fire is small. (4) The heating for a particular increment of oil rarely exceeds 20 min.; the danger of chem. decompn. is decreased. (5) The personnel required is small. The investment in masonry and brick work is high.

FRANK MARSH

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Fuchs, Karol

POLAND / Chemical Technology. Chemical Products and Their Application - Treatment of solid mineral fuels J-8

Abs Jour : Referat Zhur - Khimiya, No 2, 1958, 5847

Author : Fuchs Karol

Inst : Not given

Title : Centennial of the Warsaw Gas Plant

Orig Pub : Koks, smola, gaz, 1957, 2, No 1, 1-3

Abstract : No abstract.

Card 1/1

31921
Z/038/62/000/002/001/004
D286/D303

21.1000

AUTHORS: Fuchs, Klaus and Hessel, Hans

TITLE: On the possibilities of operating a breeder reactor with natural uranium without fuel make-up

PERIODICAL: Jaderná energie, no. 2, 1962, 37-42

TEXT: The article proves by neutron-physical calculations that it is generally possible to realize a fast breeder fueled by natural uranium and operating in the state of fuel stability, i.e. at an equilibrium of Pu^{239} produced from U^{238} and Pu^{239} disintegrated by fission. This investigation is made (a) for a heterogeneous reactor where fuel elements are gradually advanced and finally exchanged, and the state of stability is reached by maintaining the reactor critical; and (b) for a homogeneous reactor to which natural uranium is continuously fed and from which the corresponding portion of the homogeneous mixture is removed. This reactor type has a lower fuel utilization than a heterogeneous reactor; however, the mat-

Card 1/2

Z/056/62/019/001/008/012
I037/I237

AUTHOR: Fuchs, K.

TITLE: Immersion quenching of camshafts

PERIODICAL: Přehled technické a hispodářské literatury. Hutnictví a strojírenství, v. 19, no. 1, 1962, 35

TEXT: Description of successful carrying out of immersion quenching of camshafts made of steel CK 45. The camshafts prepared from normalized incandesced steel are heated in a salt bath to an elevated quenching temperature for only 60 seconds. The annealed camshafts have merely a 3 mm thick quenched layer of a hardness of 55–61 HRc. 60 work minutes were saved on one camshaft as compared with that obtained by the powder process. There are 6 photos, 3 microphotos, 1 drawing, 2 diagrams, 2 tables and 2 references.

HS 62–426. 1961 III Maschinenbau, Leipzig 10, no. 3, 106–107

[Abstracter's note: Complete translation.]

Card 1/1

Fuchs, Ladislas

Fuchs, Ladislas. On quasi-primary ideals. Acta Univ. Szeged. Sect. Sci. Math. 11, 174–183 (1947).

Let R be an integral domain with identity element. An ideal Q is defined to be quasi-primary (q. p.) if $ab \in Q$ implies that some power of a or of b is in Q; Q is q. p. if and only if its radical is prime. If R is Noetherian, then every ideal is the intersection of a finite set of q. p. ideals such that no proper subset has q. p. intersection. The numbers of q. p. components and their radicals are uniquely determined. The connection between this decomposition and those given by E. Noether [Math. Ann. 83, 24–66 (1921)] is discussed.

I. S. Cohen (Philadelphia, Pa.).

Source: Mathematical Reviews, 1948, Vol 9, No. 2

FUCHS, LADISLAS

2000

Fuchs, Ladislas. The extension of the notion "relatively prime". Acta Univ. Szeged. Sect. Sci. Math. 13, 43–47 (1949).

The author generalizes to non-Noetherian rings the results of a previous paper [Norske Vid. Selsk. Forh., Trondhjem 20, no. 7, 25–28 (1947); these Rev. 10, 6]. If A is an ideal in a ring R, then b is said to be primary to A if $A:b$ is contained in the radical of A. Then b is primary to A if and only if it lies in no isolated primary component of A. The element b is said to be almost prime to A if b is prime to the radical of A; this will be true if and only if every power of b is primary to A. The properties "prime to A" and "almost prime to A" coincide if A is the intersection of its isolated primary components. Using the above concepts, and placing some restrictions on R, the author gives some characterizations of primary and quasiprimary ideals. *I. S. Cohen* (Cambridge, Mass.).

LFH

Source: Mathematical Reviews, Vol 10, No. 10

Fuchs, L

2/8

Fuchs, L. The extension of partially ordered groups. Acta Math. Acad. Sci. Hungar. 1, 118–124 (1950). (English. Russian summary)

In this paper the author generalizes to the case of ordered groups the known method of Schreier for constructing all extensions of one group by another. Conditions under which the ordered group extension is a lattice or totally ordered are also mentioned. *L. Nachbin* (Rio de Janeiro).

Source: Mathematical Reviews, Vol 13 No. 5

Fuchs, L.

Fuchs, L. On semi-groups admitting relative inverses and having minimal ideals. Publ. Math. Debrecen 1, 227–231 (1950).

This paper is concerned with semi-groups admitting relative inverses in the sense that if a belongs to such a semi-group S, then there exist elements e, a' in S such that $ea = ae = a$, and $aa' = a'a = e$ [cf. Clifford, Ann. of Math. (2) 42, 1037–1049 (1941); these Rev. 3, 199]. Two elements a, b of S belong to the same class C_e if $aS = bS$. The class C_e is a semi-group with the following structure. It is the sum of disjoint groups G_e, these groups being isomorphic to a group G under an isomorphism $x \to x_e$. Multiplication in C_e is then defined by $x_e y_f = (xy)_f$. Analogous results hold for the classes D_e defined by the relation $Sa = Sb$. The restriction is then made that S contains a minimal left ideal. It then follows that it also contains minimal right ideals. Further, the union of all minimal left ideals coincides with the union of all minimal right ideals and this union is a semi-group having a similar structure to that termed the kernel in the case where S is finite [Suschkewitsch, Math. Ann. 99, 30–50 (1928)]. The author next defines the rank of a principal right ideal as follows. If the ideal is minimal, it has rank 1. The rank is n if every principal right ideal properly contained in it has rank $n-1$ or less, and there is at least one principal ideal properly contained in it of rank $n-1$. It is then shown that if aS has rank n, then the left ideal Sa also has rank n (the rank of a left ideal being similarly defined). Starting with a right ideal of rank n, the left ideals generated by generators of this ideal then have as their union a semi-group of similar structure to that of the Suschkewitsch kernel.

D. Rees (Cambridge, England).

Source: Mathematical Reviews, Vol 12 No. 7

FUCHS, L.

Fuchs, L. On mean systems. Acta Math. Acad. Sci. Hungar. 1, 303–320 (1950). (English. Russian summary)

The discussion by Kolmogoroff [Atti Accad. Naz. Lincei. Rend. Cl. Sci. Fis. Mat. Nat. (6) 12, 388–391 (1930)] and Nagumo [Jap. J. Math. 7, 71–79 (1930)] of necessary and sufficient conditions in order that a sequence of mean value functions M_n be quasi-arithmetic,

$$M_n(x_1, \cdots, x_n) = f^{-1}\left[\frac{f(x_1)+\cdots+f(x_n)}{n}\right],$$

has subsequently been extended by many authors in various directions. The author now gives a further algebraic generalization, defining operations having properties of mean values in completely ordered systems; in particular, the nonalgebraic postulate of continuity is here replaced by an archimedian axiom. *E. F. Beckenbach* (Los Angeles, Calif.).

Source: Mathematical Reviews, Vol. 13 No. 10

Mathematical Reviews
Vol. 15 No. 1
Jan. 1954
Algebra

7-14-54
LL

2

✓ *Fuchs, László. On a new type of radical. Comptes Rendus du Premier Congrès des Mathématiciens Hongrois, 27 Août–2 Septembre 1950, pp. 435–443. Akadémiai Kiadó, Budapest, 1952. (Hungarian. Russian and English summaries)

The author observes that the Jacobson radical of a ring often contains elements which are not divisors of zero, unlike classical radicals which even consist of nilpotent elements. He proposes a new radical designed to contain only divisors of zero. Call s a zeroid element if $s+a$ is a left divisor of zero whenever a generates a two-sided ideal consisting entirely of left divisors of zero. The radical Z is to be the union of all ideals consisting of zeroid elements. Examples reveal that Z is incomparable with the Jacobson radical J. For the ring of p-adic integers, $J=(p)$ and $Z=0$. For the ring of polynomials in two variables reduced modulo $I=(x^2, xy)$, we have $J=(x)/I$, $Z=(x, y)/I$. A detailed account in English is promised for a later paper.

I. Kaplansky (Chicago, Ill.).

Fuchs L.

Fuchs, L. On abelian groups in which the classes of isomorphic proper subgroups contain the same number of subgroups. Čehoslovack. Mat. Ž. 2 (77) (1952), 387–390 (1953). (Russian. English summary)

Let all the non-trivial subgroups of an abelian group G be divided into classes of isomorphic subgroups. If each such class has precisely k members ($k>1$), then G is a finite abelian group of type (p, p) or of type (p, p, p). Reference is made to T. Szele [Acta Math. Acad. Sci. Hungar. 3, 127–129 (1952); these Rev. 14, 351], where the case $k=1$ is settled. *F. Haimo* (St. Louis, Mo.).

Mathematical Reviews
Vol. 14 No. 7
July-Aug. 1953
Algebra

7-14-54
LL

Fuchs, L. On subdirect unions. I. Acta Math. Acad. Sci. Hungar. 3, 103-120 (1952). (Russian summary)

Let A and B be two algebraic structures (in the sense of Bourbaki, i.e., with binary operations only) of the same type (i.e., with the same operations, rules, and, possibly, operator domains). The author wishes to construct all structures G which are subdirect unions of A and B. For this purpose it is obviously sufficient that some homomorphic image of A is isomorphic to some homomorphic image of B. For then G can be taken as the set of all those pairs (a, b) with a A, b B in which a and b belong to residue-classes (modulo the respective kernels of the homomorphisms) which correspond to each other in the given isomorphism and where the operations on pairs are performed component-wise. The author shows that in the cases of groups, rings, Boolean algebras, etc. (more generally in all structures in which homomorphisms are uniquely determined by the set of elements mapped on the neutral element) this sufficient condition is also necessary: one obtains all subdirect unions of A and B by choosing suitable substructures A_0 and B_0 with a definite isomorphism $A/A_0 \cong B/B_0$. Simple examples, such as cyclic or quasi-cyclic p-groups, follow the general discussion.

K. A. Hirsch.

FUCHS, L.

Mathematical Reviews
Vol. 14 No. 10
Nov. 1953
Algebra

Fuchs, L. The direct sum of cyclic groups. Acta Math. Acad. Sci. Hungar. 3, 177–195 (1952). (Russian summary)

The author develops new criteria for an Abelian group to possess a basis, i.e., to be the (restricted) direct sum of cyclic groups. These are based on the new concept of the "relative" order of two elements of a group. Let G be an additively written Abelian group and a, b two of its elements of infinite order. Let S be a linearly independent set of elements of G which includes b. Then the phrase "a is of greater order than b, relative to S" shall mean that 'there exists a relation

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(...)

$ra = sb + \sum_i s_i b_i$ $(b_i \in S, b \neq b_i)$ in which $|r| > |s|$. (If b has finite order, the meaning shall be the usual.) Note that this order relation need not be transitive, and that there may be incomparable elements. The two criteria are now: 1. A subset B of the Abelian group G is a basis for G if and only if (i) it is a maximal independent system for G; (ii) the set is no longer independent if any element of B is replaced by one of greater order, relative to B. 2. A subset B of the Abelian group G is a basis for G if and only if (i) it is a (minimal) set of generators for G, not including 0; (ii) the set no longer generates G if any element of B is replaced by one of smaller relative order. (In the case of primary Abelian groups the first criterion has recently been established by A. Kertész [same Acta 3, 121–126 (1952); these Rev. 14, 617].)

An an application the author gives a new proof of Kulikov's result [Mat. Sbornik N.S. 16(58), 129–162 (1945); these Rev. 8, 252] that the existence of a basis is hereditary in subgroups. Finally, he proves the following new theorem: If the Abelian group G is an extension of H by F, and if both F and H possess bases, then G itself possesses a basis if and only if the following condition is satisfied: (i) if H is mixed or torsion-free, then the elements of the periodic part of F are bounded; (ii) if H is a torsion-group, then for all primes p which occur as orders in H the p-primary components of F have bounded orders. *K. A. Hirsch* (London).

FUCHS, L.,

Fuchs, L., and Szele, T. Contribution to the theory of semisimple rings. Acta Math. Acad. Sci. Hungar. 3, 233-239 (1952). (Russian summary).

In this paper, a ring R is called semisimple if R has no non-zero nilpotent left ideals and satisfies the minimum condition on left ideals. Generalizing a classical theorem of Wedderburn and Artin, the authors show that R is semisimple if and only if every left ideal of R has a right unit, or equivalently every left ideal is generated by an idempotent. The sufficiency is proved by showing that R is a direct sum of a finite number of minimal (non-nilpotent) left ideals (which are total matric algebras over skew fields; cf., e.g., Artin, Nesbitt, and Thrall, Rings with minimum condition, Univ. Michigan Publ. Math. no. 1, 1944, chapters 4 and 5; these Rev. 6, 33).

They also show that every left ideal of R has a left unit if and only if R is a direct sum of skew fields. Every subring of R has a left unit if and only if R is a direct sum of a finite number of fields F_i, each of which is an algebraic extension of the field of integers modulo some prime p_i. An interesting corollary is that every subring of a skew field F is a field if and only if F is an algebraic extension of the field of integers modulo some prime p. (A minor error occurs in the proof of Lemma 2; M_2 should be described as a left ideal of R which is a maximal left ideal of M_1.)

M. Henriksen (Lafayette, Ind.).

SO: Mathematical Review, Vol 14, No. 8, Sept. 1953, pp. 713-830.

FUCHS, L.

2800

Fuchs, L. A remark on the Jacobson radical. Acta Sci. Math. Szeged 14, 167-168 (1952).

The radical of a ring R with left unit is the analog of the Φ-subgroup in group theory: the set of all elements $r \in R$ which may be omitted from each generating system of the right R-module R. *D. Zelinsky* (Evanston, Ill.)

Source: Mathematical Reviews, Vol 13 No. 10

FUCHS, L.

Mathematical Reviews
Vol. 15 No. 3
March 1954
Analysis

7-13-54
LL

(2) Math.

Fuchs, László. On algebraic systems in which an operation taking mean values is defined. Magyar Tud. Akad. Mat. Fiz. Oszt. Közleményei 3, 27–35 (1953). (Hungarian) 2

This paper is a shortened Hungarian version of a previous paper of the author [Acta Math. Acad. Sci. Hungar. 1, 303–320 (1950); these Rev. 13, 922]. *P. Erdős.*

L. FUCHS.

"The direct sum of cyclic groups." p. 177. (ACTA MATHEMATICA ACADEMIAE SCIENTIARUM HUNGARICAE, Vol. 3, No. 3, 1953, Budapest, Hungary)

SO: Monthly List of East European Accessions, L.C., Vol. 2 No. 7, July 1953, Uncl.

L. FUCHS, T. SZELE.

"Contribution to the theory of semisimple rings." p. 233. (ACTA MATHEMATICA ACADEMIAE SCIENTIARUM HUNGARICAE, Vol. 3, No. 3, 1953, Budapest, Hungary)

SO: Monthly List of East European Accessions, L.C., Vol. 2 No. 7, July 1953, Uncl.

FUCHS, L.

"Development of algebra in the light of algebraic research in Hungary."
Kozlemenyei, Budapest, Vol 3, No 3, 1953, p. 381

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

FUCHS, L.

Mathematical Reviews
Vol. 15 No. 4
Apr. 1954
Algebra

8-24-54
LL

(3) ..4

Fuchs, L., Kertész, A., and Szele, T. On a special kind of duality in group theory. I. Acta Math. Acad. Sci. Hungar. 4, 169–178 (1953). (Russian summary)

If G is a group, then $S(G)$ is the set of all essentially different subgroups of G and $F(G)$ is the set of all the essentially different homomorphic images of G [where two groups are essentially the same if they are isomorphic]. The authors determine all countable abelian groups A such that $S(A)=F(A)$; they determine all pairs of countable abelian groups A and B such that $S(A)=F(B)$ and $F(A)=S(B)$; and they determine all pairs of countable abelian groups U, V such that $S(U)=F(V)$. *R. Baer.*

FUCHS, L.; SZELE, T.

"Soviet Results in the Field of Abstract Algebra." p. 92, (MATEMATIKAI LAPOK, Vol. 4, no. 2/3, 1953, Budapest, Hungary)

SO: Monthly List of East European Accessions, LC, Vol. 3, No. 5, May 1954/Unclassified

FUCHS, L.

"On the structure of Abelianp-groups." In English.
Acta Mathematica, Budapest, Vol 4, No 3/4, 1953, p. 267

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

FUCHS, L.

"On a special kind of duality in group theory. I." In English.
Acta Mathematica, Budapest, Vol 4, No 3/4, 1953, p. 299

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

FUCHS, L.

"Main thesis of the ideal theory."
Kozlemenyei, Budapest, Vol 4, No 1, 1954, p. 37

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

Fuchs, L.

Fuchs, L. On the fundamental theorem of commutative [illegible], Acta Math. Acad. Sci. Hungar. 5, 95–99 (1954). (Russian summary)

The author defines: the fundamental theorem of ideal theory holds for an ideal A in a commutative ring R if $A=P_1^{k_1}\cdots P_r^{k_r}$ with uniquely determined prime ideals P_i and uniquely determined minimal exponents k_i, and if for every ideal B such that $A\subseteq B\subseteq R$, $B=P_1^{l_1}\cdots P_r^{l_r}$ with $0\leq l_i\leq k_i$. He then proves in an elementary way: the fundamental theorem of ideal theory holds for an ideal A in a commutative ring with unit if and only if (1) R/A satisfies the minimum condition and (2) if the principal component $A(P)$ of A for a prime ideal divisor P of A satisfies $A(P)\subset P$, then P^2 is an immediate multiple of P. *I. N. Herstein.*

Fuchs, L. On a property of basic subgroups. Acta Math. [illegible] Hungar. 5, 143–144 (1954). (Russian summary)

The second theorem in the paper of the preceding review is proved more simply. *I. Kaplansky* (Chicago, Ill.).

FUCHS, L.: SZELE,T.

Abelian groups with a single maximum subgroup. p. 287. Vol 5, no. 4, 1955
KOZLEMENYEI. Budapest, Hungary.

So: Eastern European Accession. Vol 5, no. 4, April 1 '56

FUCHS, L.

1 - F/W

Fuchs, L. A lattice-theoretic discussion of some problems in additive ideal theory. Acta Math. Acad. Sci. Hungar. 5, 299–313 (1954). (Russian summary)

The author considers a complete lattice L in which a binary associative but not necessarily commutative multiplication is defined possessing all essential properties of the lattice of the two-sided ideals of a general associative ring with a unit element. He generalizes the structural results concerning the additive theory of ideals in the following manner. He considers an operator ψ which is a mapping $x \to \psi(x)$ of L into itself. An element p is termed ψ-prime if $x_1 x_2 \cdots x_k \leqq p$ (k arbitrary) implies $x_i \leqq \psi(p)$ for some i. An element q is called ψ-primary if $x_1 x_2 \cdots x_k \leqq q$ (k arbitrary) implies that for each i one has either $x_i \leqq q$ or $x_j \leqq \psi(q)$ for some $j \neq i$. An element r is called right ψ-primal if $\psi(r)$ is the join of all x not right prime to r, i.e. $r : x > r$, where $r : x$ is the join of all y satisfying $yx \leqq r$. Finally, an element s is called strongly right ψ-primal or ψ^*-primal if $x \leqq \psi(s)$ is equivalent to $s : x > s$. It is shown that the following implications hold: ψ^*-primal $\to$ ψ-primal $\to$ ψ-primary $\to$ ψ-prime. In

(over)

FUCHS, L.

the special case where ψ is the identity mapping, all these notions coincide. Another interesting case is where $\psi(x)$ is the join of all a with the property $a^k \leqq x$ for some natural integer k. In this case ψ satisfies the following conditions: 1) $x \leqq \psi(x)$, 2) $x \leqq y$ implies $\psi(x) \leqq \psi(y)$; and 3) $\psi(x \cap y) = \psi(x) \cap \psi(y)$. In the presence of the ascending chain condition one has in addition 4) $\psi(\psi(x)) = \psi(x)$ and 5) $x \leqq \psi(y)$ implies $\psi(x) \leqq \psi(y)$. The author also shows that for this mapping the notions ψ-primary and ψ-primal coincide, and if the ascending chain condition holds then also the notions ψ-primary, ψ-primal and ψ^*-primal are identical. Also, other examples of the operator ψ are considered. For the case where $x \leqq \psi(y)$ implies $\psi(x) \leqq \psi(y)$ the author finds necessary and sufficient conditions under which the meet of a finite number of elements with a certain ψ-property (e.g. ψ-prime or ψ-primary) has again the same property. Finally, he obtains unicity theorems concerning the representation of elements of L as meets of elements having a certain ψ-property. Szász

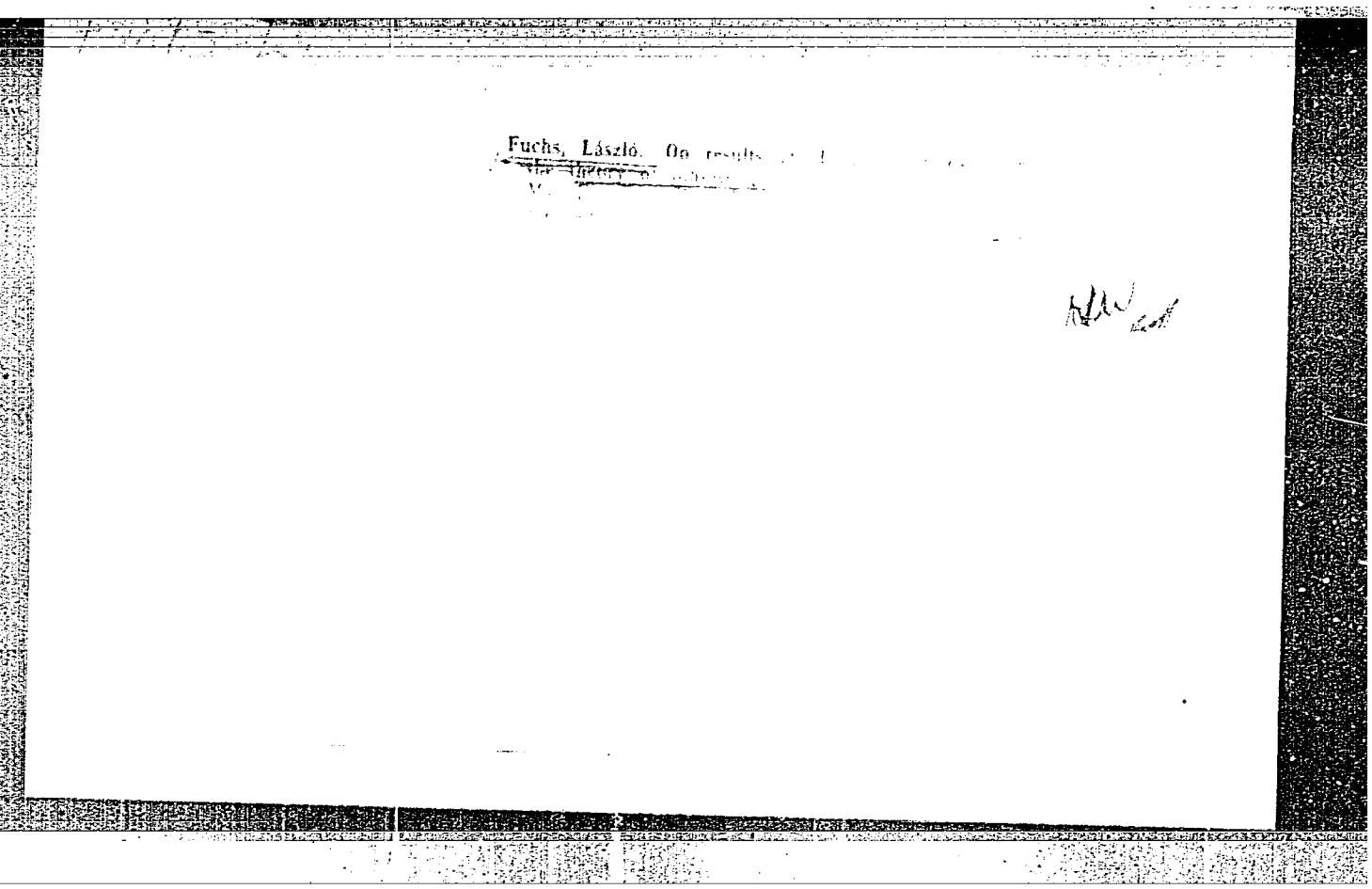
J. Levitzki (Jerusalem).

2/2

FUCHS, L.

Results obtained by Hungarian scientists with the theory of finite groups. p. 315. KOZLEMENYEI. Budapest. Vol. 5, no. 3, 1955.

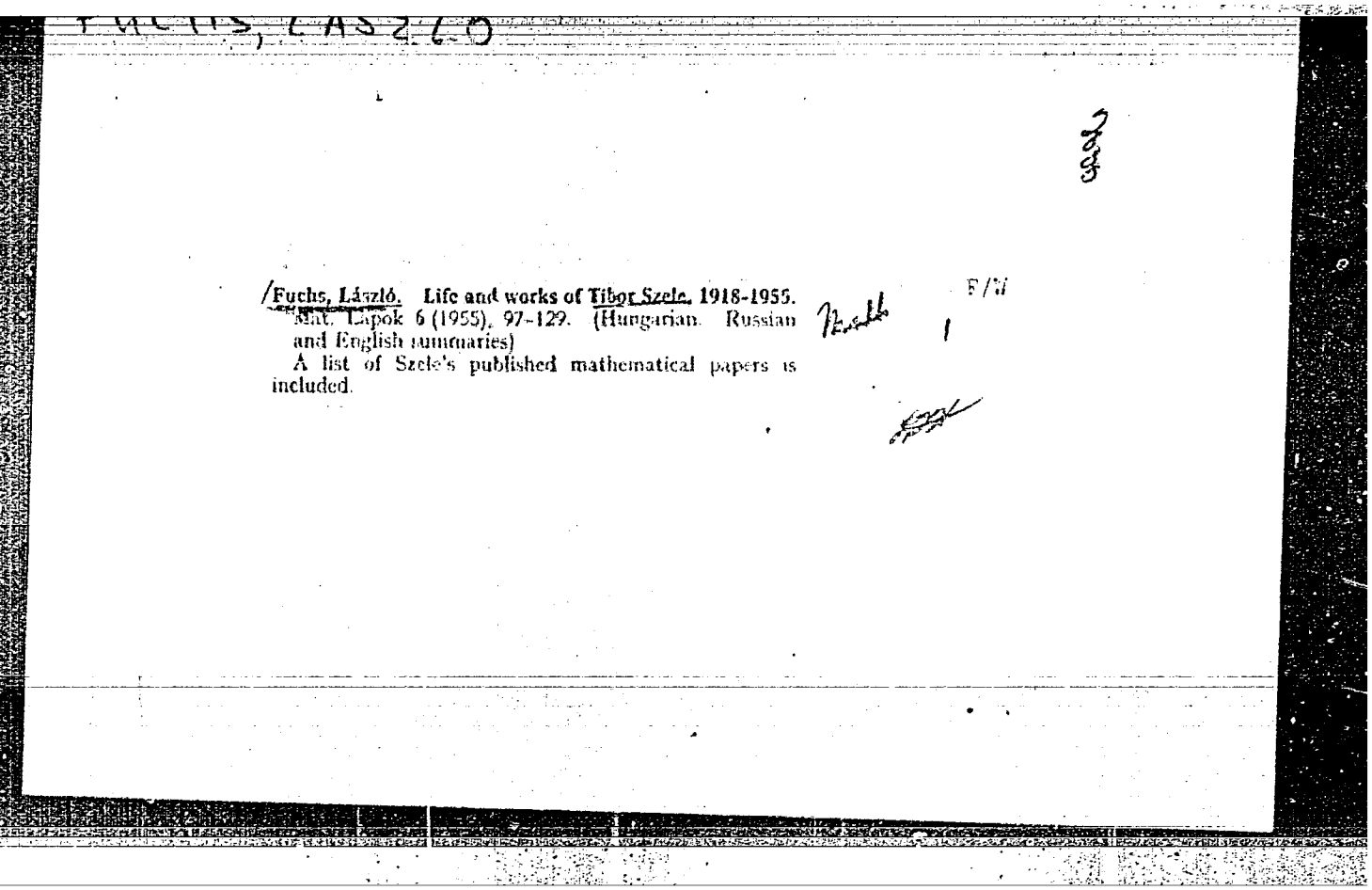
SOURCE: East European Accessions List (EEAL), LC, Vol. 5, No. 2, Feb. 1956



Fuchs, László; and Szele, Tibor. Abelian groups with a single maximal subgroup. Magyar Tud. Akad. Mat. Fiz. Oszt. Közl. 5 (1955), 367-389. (Hungarian)

The authors prove that an abelian group G has a single maximal subgroup if and only if it admits a representation as a direct sum $A+B$, where A is an arbitrary complete abelian group, and B is either a group of prime-power order or a group isomorphic to a pure subgroup ("Servanzuntergruppe") of the additive group of the p-adic integers. This theorem answers an apparently difficult group-theoretical question in the commutative case.

L. Kertész (Debrecen).



/Fuchs, László. Life and works of Tibor Szele. 1918-1955. Mat. Lapok 6 (1955), 97-129. (Hungarian. Russian and English summaries)

A list of Szele's published mathematical papers is included.

FUCH, L.

Laszlo Redei's Algebra I; a book review. p. 288. MATEMATIKAI LAPOK. Budapest. Vol. 6, no. 2/3, 1955.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, No. 2, Feb. 1956

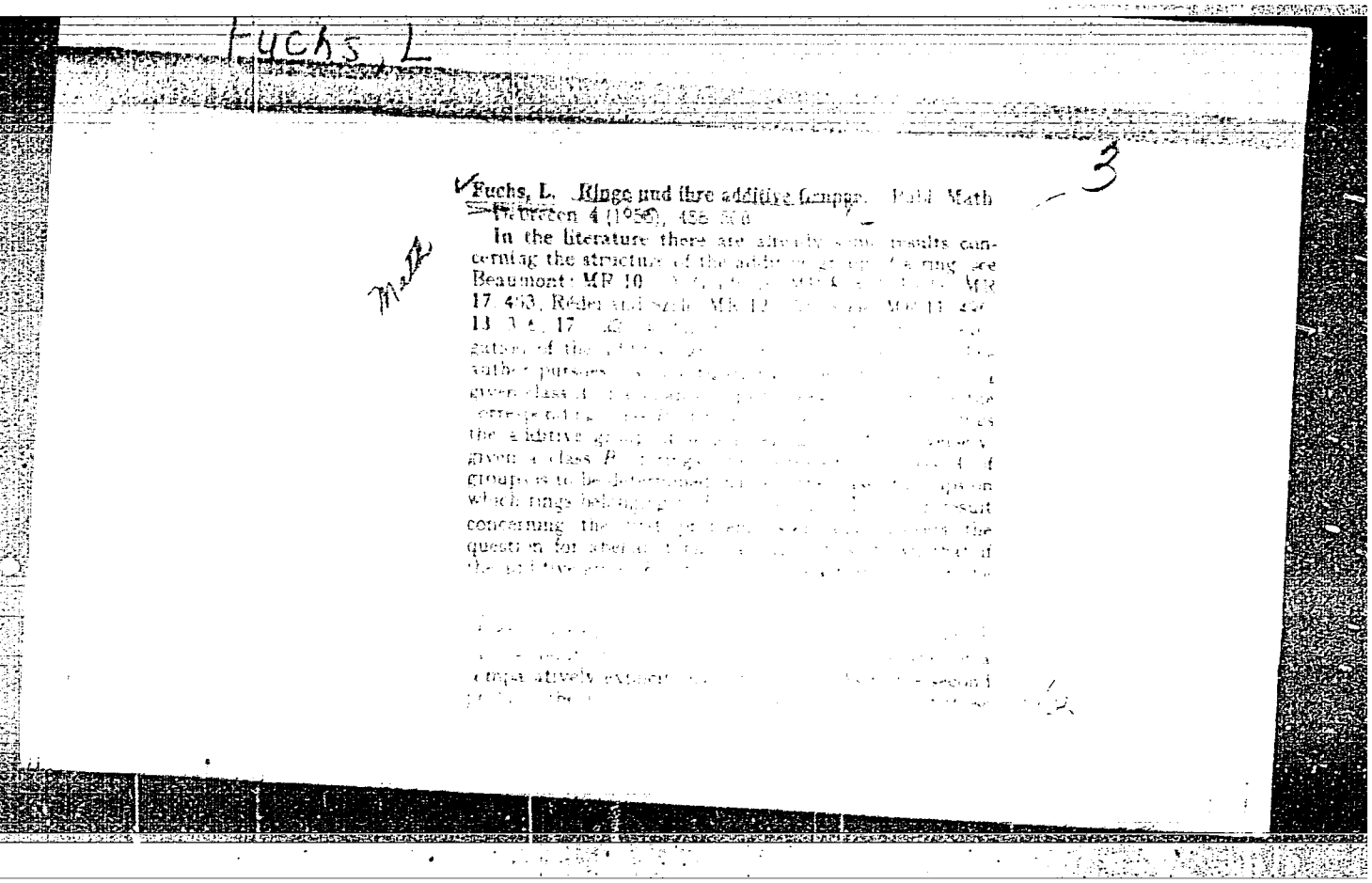
Fuchs, L.

Fuchs, L., Kertész, A., and Szele, T. On abelian groups whose subgroups are endomorphic images. Acta Sci. Math. Szeged 16, 77–88 (1955).

1 - F/W

The last two authors studied abelian groups for which every finitely generated subgroup is an endomorphic image [same Acta 15, 70–76 (1953); MR 15, 196]. Sasiada [Bull. Acad. Polon. Sci. Cl. III. 2, 359–362 (1954); MR 16, 565] made the stronger assumption that every countable subgroup is an image. In this third paper on the subject the authors characterize abelian groups for which every subgroup is an endomorphic image. In the case (probably most interesting) of a primary group the condition turns out to be the equality of two cardinal numbers. Define the final rank of G to be the minimum of the ranks of $p^\omega G$. Then the desired condition is the equality of the final rank of G and of a basic subgroup of G (the second of these cardinal numbers can also be described as the lim sup of the first $\aleph_0$ Ulm invariants). Suitable additional considerations give explicit results in the torsion-free and mixed cases.

I. Kaplansky (Chicago, Ill.).



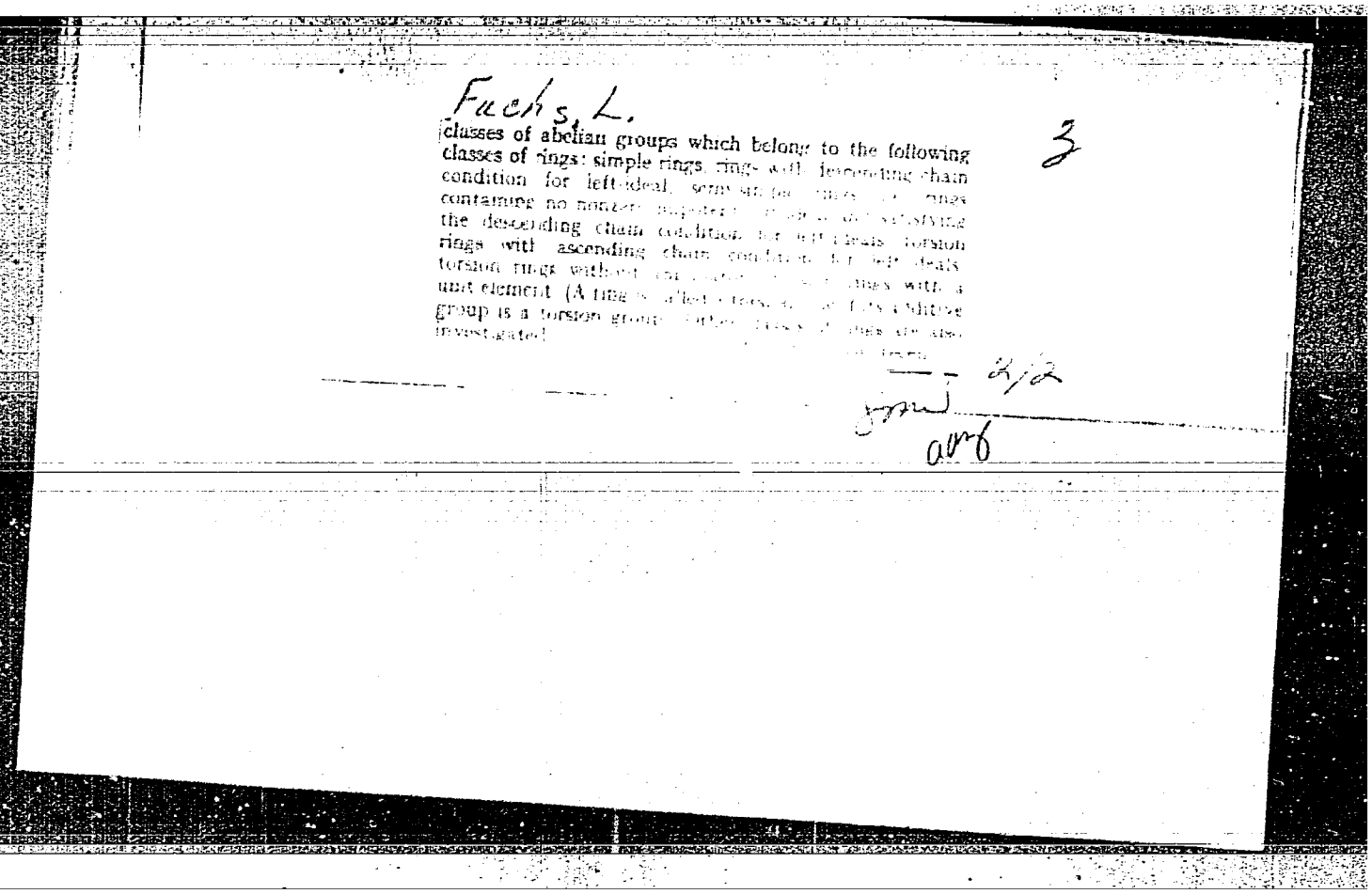
Fuchs, L

3

Fuchs, L. Rings and their additive groups. Publ. Math. Debrecen 4 (1956), 488–508

In the literature there are already some results concerning the structure of the additive group of a ring, see Beaumont: MR 10 [illegible] MR 17 463, Réder and Szele MR 12 [illegible] MR 13 [illegible] 17 [illegible] ... nature of the ... rather pursues ... given class ... the additive ... given a class ... groups is to be ... which rings ... concerning the ... question for ...

... comparatively ...



Fuchs, L.

classes of abelian groups which belong to the following classes of rings: simple rings, rings with [illegible] condition for left-ideals, [illegible] rings containing no nonzero [illegible] satisfying the descending chain condition for left-ideals, torsion rings with ascending chain condition for left-ideals, torsion rings without [illegible] rings with a unit element (A ring is called [illegible] group is a torsion group [illegible] investigated.

3

4/2

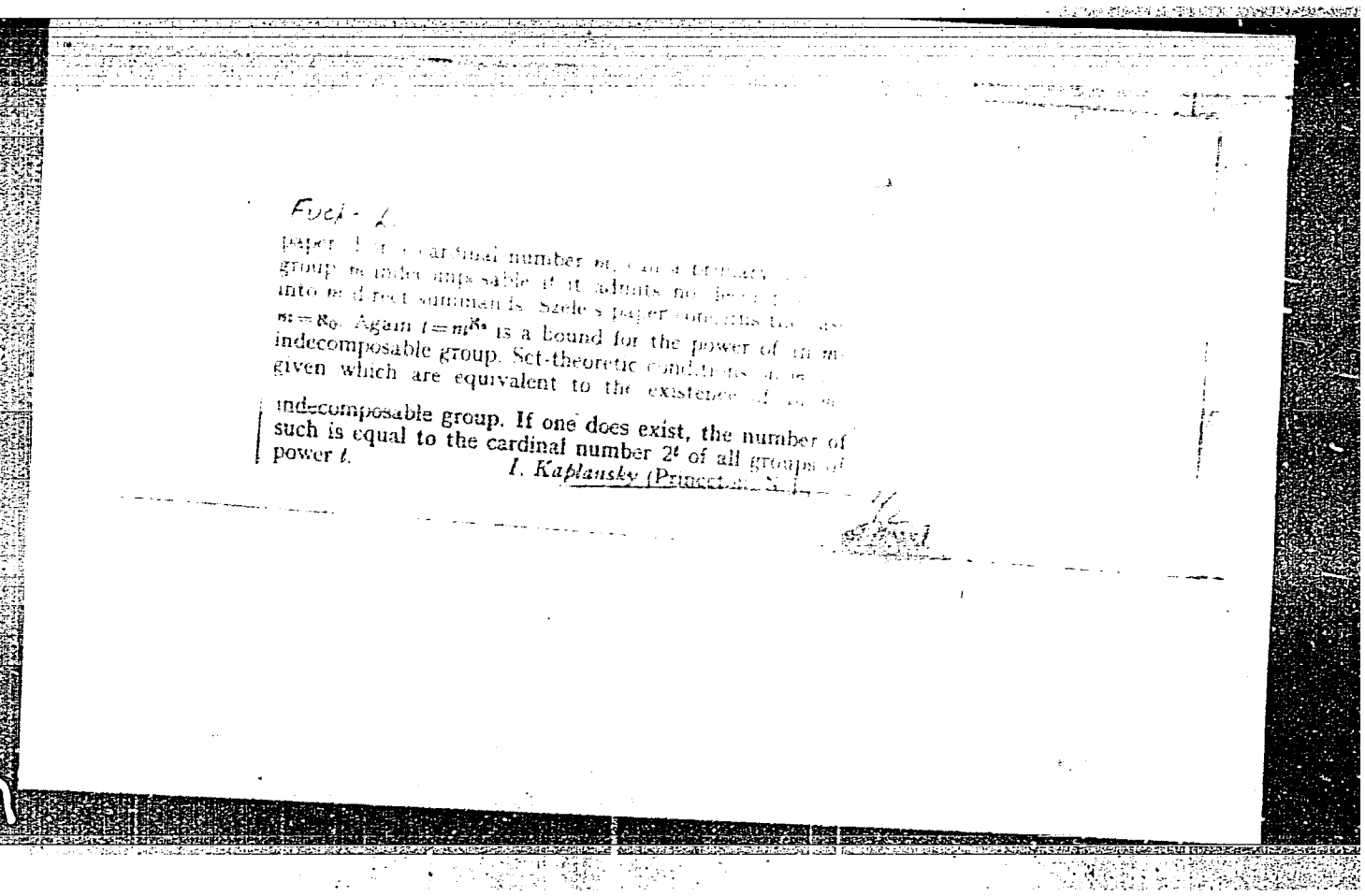
amb

Fuchs, L.

Szele, T. On quasi-indecomposable abelian [illegible]

summands [illegible] are finite or have the [illegible] continuum and that the endomorphism [illegible]

Fuchs, L. On abelian torsion groups which can not be represented as the direct sum of a given cardinal number of components [illegible]

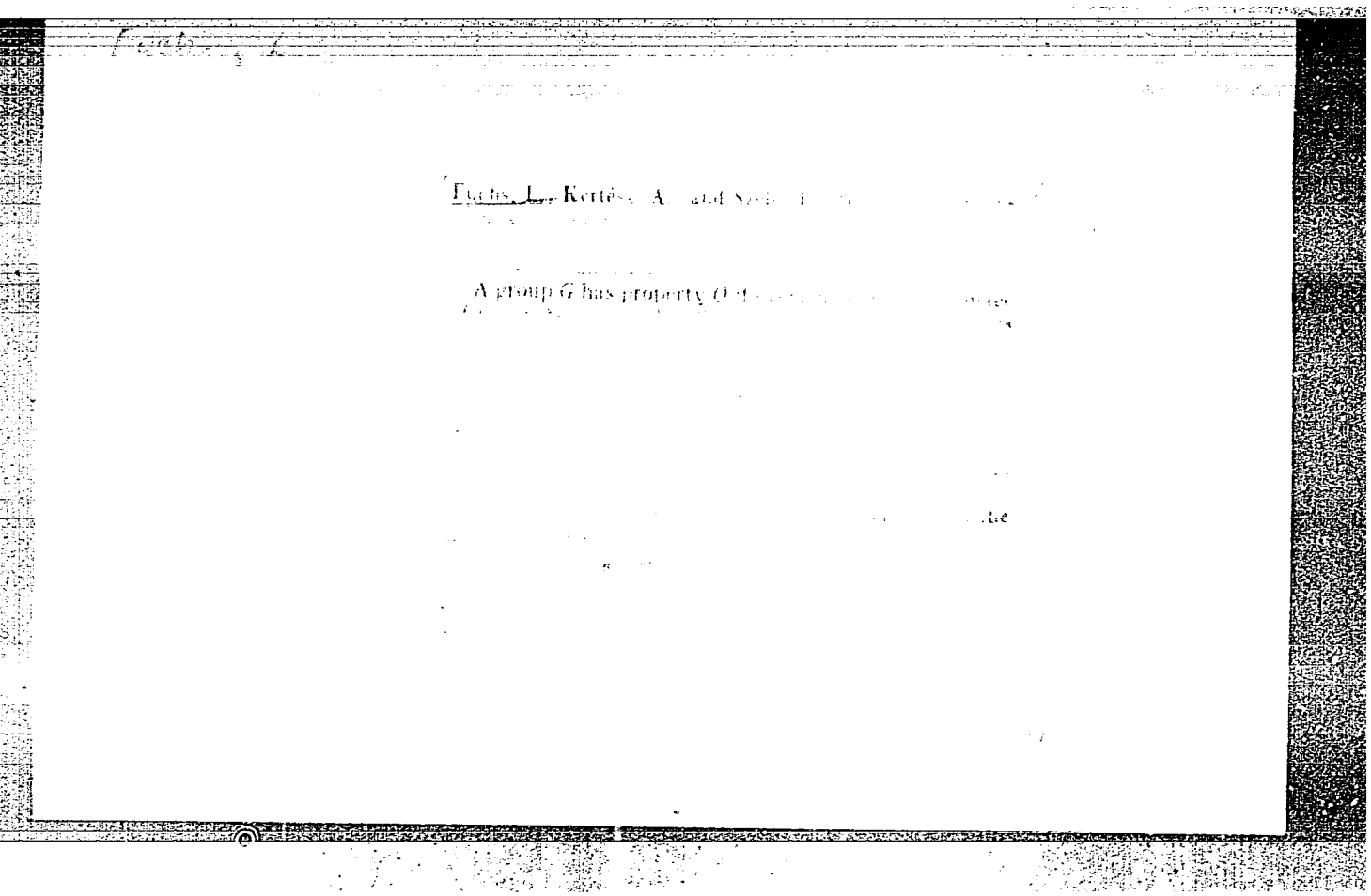


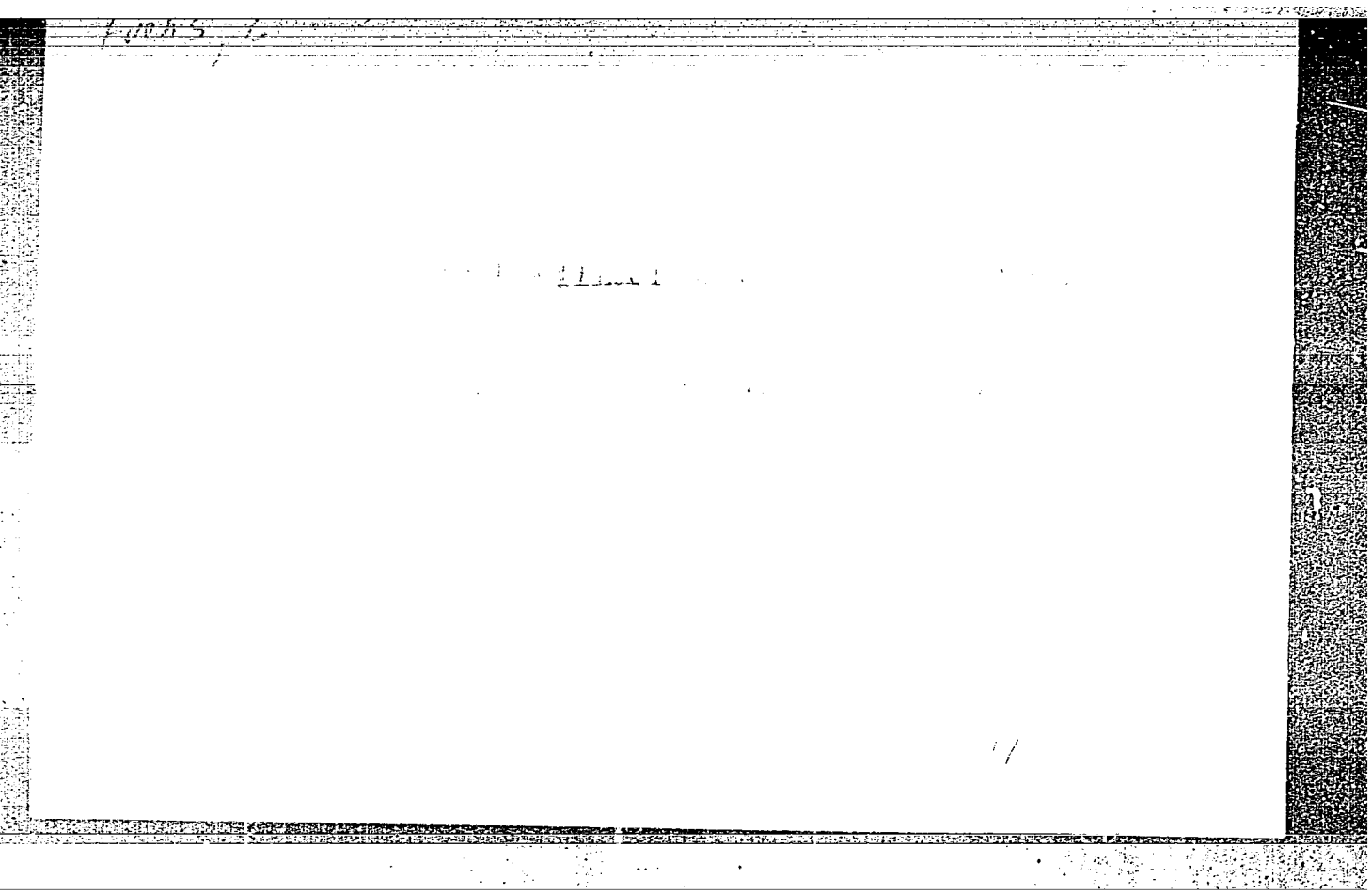
Fuchs - 2

[illegible] cardinal number m, [illegible] group is indecomposable if it admits no [illegible] into a direct summand. Szele's paper [illegible] $m=\aleph_0$. Again $t=m^{\aleph_0}$ is a bound for the power of an indecomposable group. Set-theoretic conditions [illegible] given which are equivalent to the existence [illegible]

indecomposable group. If one does exist, the number of such is equal to the cardinal number 2^t of all groups of power t.

I. Kaplansky (Princet[illegible])





UC

2.

4590:

Fuchs, L. On a directly indecomposable abelian group of power greater than continuum. Acta Math. Acad. Sci. Hungar. 8 (1957), 453–454.

This note establishes the existence of a group having the properties stated in the title. There are, in fact, 2^{2^c} non-isomorphic such groups, each having cardinality 2^c, where c is the cardinal of the continuum. The endomorphism ring of the basic example is commutative; it had been conjectured that groups of this size necessarily had non-commutative endomorphism rings.

F. B. Wright (New Orleans, La.)

F/W

On the Tensor Product of Torsion Groups.

3

1-F\W

Fuchs, L. Über das Tensorprodukt von Torsionsgruppen. Acta Sci. Math. Szeged 18 (1957), 29–32.

The author raises the question: which abelian groups can be represented as the tensor product of two groups? Any positive information would have obvious implications for structure theory. In this paper, the author shows that, for torsion groups, the introduction of this question serves little purpose. Theorem: If G and H are arbitrary torsion groups, their tensor product is a direct sum of cyclic p-groups. *F. B. Wright.*

CC
1/1

1-F\W

6159:

Fuchs, L. On generalized pure subgroups of abelian groups. Ann. Univ. Sci. Budapest. Eötvös. Sect. Math. 1 (1958), 41–47.

For an abelian group G, a subgroup H and a fixed cardinal $\mathfrak{m}$, the author proves that H has the property "for subgroups F, $G \supseteq F \supseteq H$ and $[F:H]<\mathfrak{m}$ imply the existence of a subgroup K with $F=H\oplus K$", if and only if H has the property "every system of linear equations over H with a set of unknowns of power less than $\mathfrak{m}$ is solvable in H whenever it is solvable in G." Such subgroups H are called $\mathfrak{m}$-pure. The $\aleph_0$-pure subgroups are just the well-known serving or pure subgroups, and, for $\mathfrak{m}>|G|$, the $\mathfrak{m}$-pure subgroups are the direct summands of G. There do exist groups with $\aleph_1$-pure subgroups, but not every union of an ascending chain of direct summands need be $\aleph_1$-pure. An $\mathfrak{m}$-pure subgroup H of a p-group G satisfies $p^\alpha H = p^\alpha G \cap H$ for all ordinals α of power less than $\mathfrak{m}$. Every subgroup H of G can be extended to an $\mathfrak{m}$-pure subgroup of G of a power not too very high. There exist $\aleph_1$-pure subgroups of free groups which are not direct summands but which are direct sums of infinite cyclic groups. Reference is made to an unpublished paper of J. Łoś, to St. Balcerzyk [Publ. Math. Debrecen 4 (1956), 357–358; MR 18, 190], to S. Gacsályi [ibid. 4 (1955), 89–92; MR 16, 898] and to E. Specker [Portugaliae Math. 9 (1950), 131–140; MR 12, 587].

F. Haimo (St. Louis, Mo.)

1958:

Fuchs, L. On the possibility of extending Hajós' theorem to infinite abelian groups. Publ. Math. Debrecen 5 (1958), 338–347.

Let G be an abelian group and S_i, $i=1, \cdots, k$, be subsets such that every $g \in G$ can be written uniquely as $g=x_1+\cdots+x_k$ with $x_i \in S_i$. Then G is a direct sum of the S_i. If each S_i is a cyclic subset (one of the form $\{0, a_i, \cdots, (n_i-1)a_i\}$) and thus G is a finite group, then Hajós' theorem states that at least one of the S_i is a subgroup. The author gives the following two theorems which reduce in the finite case to Hajós' theorem and which express somewhat the extent to which Hajós' theorem can be generalized. If G contains no subgroups of type $Z(p^\infty)$, then G is a direct sum of arbitrarily many cyclic S_α ($\alpha \in J$) implies that one of the S_α is a subgroup if and only if $G=F \oplus \sum_m C(p)$, where F is a finite group, m is an arbitrary cardinal number, p is a fixed prime, and $C(p)$ is a cyclic group of order p. If any group G is a direct sum of finitely many weakly periodic subsets Q_i, $G=Q_1+\cdots+Q_n$, then at least one of the Q_i is periodic. He calls a subset Q_i weakly periodic if there exists a $g \in G$, $g \neq 0$ such that any one of $g+Q_i$ and Q_i contains at most one element not in the other, while Q_i is called periodic if $g+Q_i=Q_i$ for some $g \neq 0$. These two theorems cover the two main opposite directions which generalizations of Hajós' theorem might run. *D. K. Harrison* (Haverford, Pa.).

FUCHS, Laszlo (Budapest)

The existence of indecomposable abelian groups of arbitary power. In English. Acta mat.Hung. no.3/4:453-457 '59. (MRAI 9:5)
(Abelian groups)

FUCHS, L.

Note on ordered groups and rings. In English. p. 167.

FUNDAMENTA MATHEMATICAE. (Polska Akademia Nauk) Warszawa, Poland.
Vol. 46, no. 2, 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 2,
Feb. 1960

Uncl.

FUCHS, L. (Budapest)

Notes on Abelian groups II. Acta mat Hung 11 no.1/2:117-125 '60.
(EEAI 9:12)

1. Presented by L.Redei.
(Abelian groups)

HAJOS, Gyorgy; SURANYI, Janos; FUCHS, Laszlo; ACZEL, Janos; KALMAR, Laszlo; (Szeged)
SZOKEFALVI-NAGY, Bela (Szeged)

Report on the 5th regular meeting arranged by the Janos Bolyai Mathematical Society. Mat lapok 12 no.1/2:127-144 '61

1. President, Janos Bolyai Mathematical Society, and Editor, "Matematikai Lapok" (for Hajos). 2. Secretary General, Janos Bolyai Mathematical Society (for Suranyi). 3. Editor, "Matematikai Lapok" (for Aczel).

FUCHS, L. (Budapest)

Note on fully ordered semigroups. Acta mat Hung 12 no. 1/2:255-259 '61. (EEAI 10:9)

1. Presented by L. Redei.

(Groups, Theory of)

FUCHS, L. (Budapest)

On the ordering of quotient rings and quotient semigroups.
Acta math Szeged 22 no.1/2:42-45 '61.

1. Submitted December 15, 1960.

HOSSZU, Miklos, dr.; REDEI, Laszlo; FUCHS, Laszlo; ACZEL, Janos

Interpretation of functional equations by means of algebraic systems. I. Mat kozl MTA 12 no.4:303-315 '62.

FUCHS, L.

Note on factor groups in complete direct sums. Bul Ac Pol mat 11 no.2:39-40 '63.

1. Department of Mathematics, University, Budapest. Presented by E. Marczewski.

CSASZAR, Akos; FRIED, Ervin; FUCHS, Laszlo; HAJOS, Gyorgy; RENYI, Alfred; TURAN, Pal

Report on the 1962 Miklos Schweitzer Memorial Contest on Mathematics. Mat lapok 14 no. 3/4:346-371 '63.

1. Editorial board member, "Matematikai Lapok" (for Hajos and Renyi). 2. Managing editor, "Matematikai Lapok" (for Turan).

CSASZAR, Akos; FUCHS, Laszlo; HAJOS, Gyorgy; RENYI, Alfred; TURAN, Pal; VARGA, Otto

Report on awarding the 1963 Geza Grunwald Memorial Prizes in mathematics. Mat lapok 15 no.1/3:247-251 '64.

1. Managing Editor, "Mathematikai Lapok" (for Turan). 2. Editor, "Mathematikai Lapok" (for Hajos and Renyi).

FUCHS, L. (Budapest)

On group homomorphic images of partially ordered semi-groups.
Acta math Szeged 25 no.1/2:139-142 '64.

1. Submitted January 3, 1963.

FUCHS, L.; HALPERIN, I.

On the imbedding of a regular ring in a regular ring with identity. Fund math 54 no.3:285-290 '64.

1. University, Budapest (for Fuchs). 2. Queen's University, Kingston, Canada, and University of Paris, France (for Halperin).

FUCHS, Mieczyslaw

Szymon Syrenski-Simon Syrennius Sacranus; from the history of Polish stomatology. Czas.stomat. 8 no.4:133-138 Apr '55.

1. Z Zakladu Stomatologii Zachowawczej A.M. w Lodzi. Kierownik: doc.dr M. Fuchs. Lodz, Mawrot. 4 m.6.
(BIOGRAPHIES
Szymon Syrenski - Simon Syrennius Sacranus)
(STOMATOLOGY, history)
(DENTISTRY,
in Poland, Szymon Syrenski)

FUCHS, Mieczyslaw; JANCZUK, Zbigniew

Studies on clinical use of fluorescence in the diagnosis of the oral mucosa. Polski tygod. lek. 17 no.26:1034-1037 11 Je '62.

1. Z Zakladu Stomatologii Zachowawczej AM w Lodzi; kierownik: prof. dr Mieczyslaw Fuchs.

(MOUTH dis) (FLUORESCENCE)

USSR/Electronics Jan/Aug 1947
Atmosphere - Electricity
Particles, Charged

"On the Magnitude of Electrical Charges Carried by Particles of Atmospheric Aerocolloids," N. A. Fuchs, 10 pp

"Iz Ak Nauk SSSR, Ser Geog i Geofiz" Vol XI, No 4

A method is given of calculating the mathematical probability of collisions between gaseous ions and atmospheric particles (condensation nuclei and water droplets), based on Smoluchovski's theory of collisions between Brownian movements.
Only coulombic forces are considered for fog and cloud droplets, but mirror forces must also be taken into account in the case of small condensation nuclei.

The distribution of charges on particles of different sizes in the stationary state is derived from the probability of collisions (recombination coefficients).

Boltzmann's equation expresses this distribution for large particles (a 10-5 cm). Magnitude of charge is independent of ionic concentration.

2007

FUCHS, N. A.

FUCHS, O.

"Gigantic machinery in a large modern forge." Technicka Praca, Bratislava, Vol. 6, No. 1, Jan 1954, p.9.

SO: Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

FUCHS, O.

"Calculation of machine parts exposed to alternating stresses." Technicka Praca, Bratislava, Vol. 6, No. 1, Jan. 1954, p. 24.

SO: Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

FUCHS, O.

27

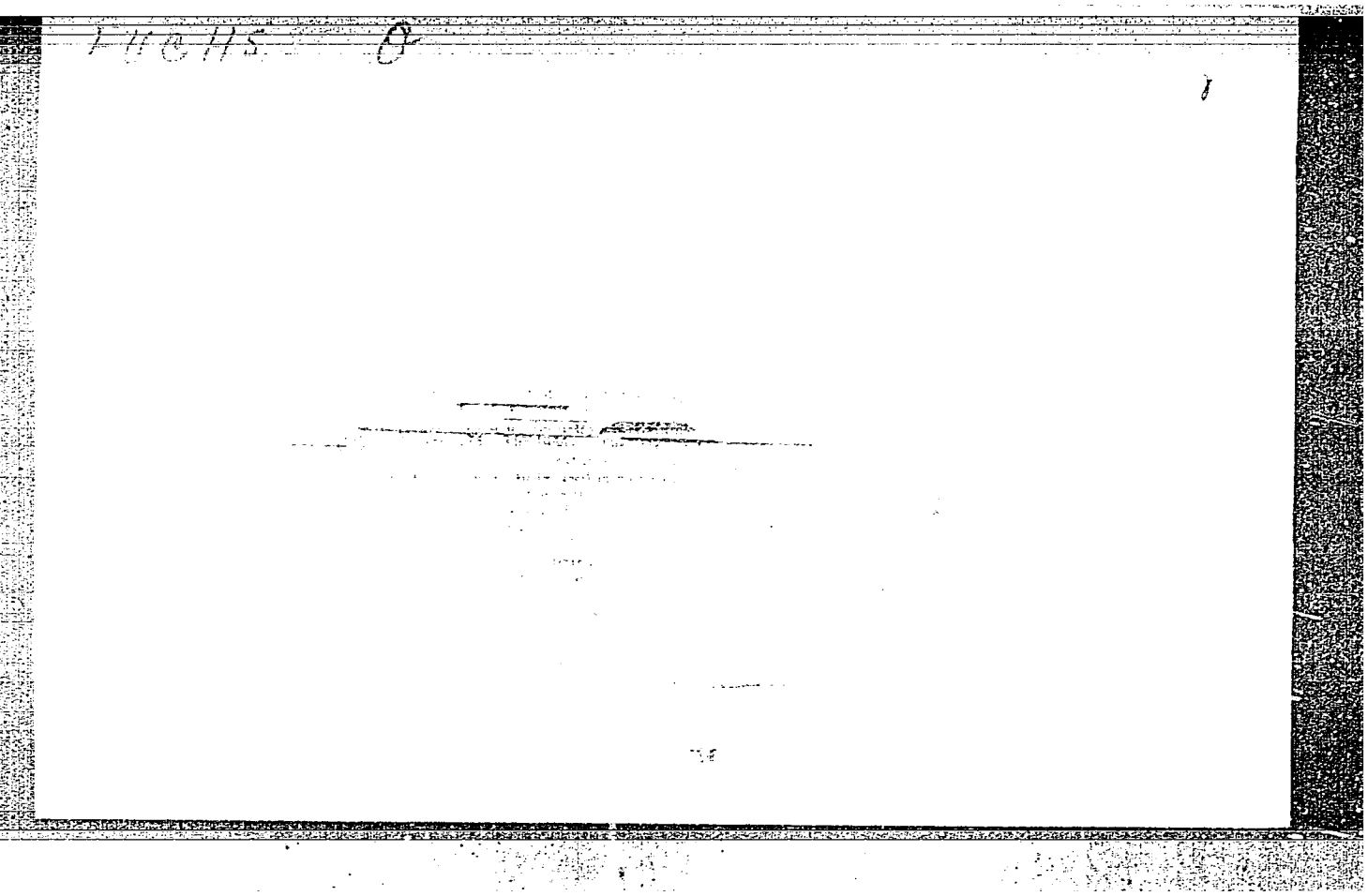
Application of complex borohydrides in organic syntheses. János Kollonitsch, Oszkár Fuchs, Valéria Gábor, and Jenő Galántay (Gyógyszeripari Kutató Intézet, Budapest). *Vegyipari Kutató Intézetek Közleményei* 4, 147–52(1954).—It was observed that $LiBH_4$ is stable at low temp. (3–4 hrs. at 10°). Its EtOH soln. was prepd. by cooling with an ice-salt mixt. separate solns. of $NaBH_4$ and LiCl in EtOH, mixing the two solns., and filtering off the NaCl. This soln. was found suitable for reducing ketones and aldehydes, including steroid ketones. New complex borohydrides such as $Mg(BH_4)_2$ (from $MgMe_2$ and diborane in abs. ether) and $Ca(BH_4)_2$ were also prepd. in a similar manner. They were found suitable for the selective reduction of various compds., both org. and inorg. They are cheap and relatively easy to prepare. Na methoxyborohydride (cf. Brown, *et al.*, *C.A.* 47, 3741e) was found suitable for the selective reduction of aldehydes, ketones, and acid chlorides. G. J. Ernyei

Distr: 4E4j/4E3d/4E2c(j)

~~FUCHS, F. O.~~ FUCHS, O.

20. Experimental data on the preparation of 2-methyl-4-amino-pyrimidine-5-aldehyde — A. Gecse, O. Fuchs. *Magyar Kemiai Folyoirat* — Vol. 61, 1956, No. 4, pp. 112—113)

The compound 2-methyl-4-amino-pyrimidine-5-aldehyde (I) was obtained in fair yields by the hydrogenation of 2-methyl-4-amino-5-cyano-pyrimidine compound in a 2 *N* hydrochloric acid solution in the presence of palladium charcoal catalyst. In the hydrogenation of the cyano compound aldimine is formed in the first stage and it is obvious that the best yields are obtained when the hydrogenation is carried out in a medium favourable for the hydrolysis of the aldimine compound. The obtained experimental data showed that at least 3 molecules of hydrochloric acid are necessary for this purpose. After hydrogenation the crude aldehyde I was precipitated from the reaction mixture by the addition of concentrated aqueous ammonia. By adding nickel formiate dissolved in concentrated aqueous ammonia to the aqueous solution of the crude product obtained in the preceding stage the nickel salt of the aldimine separates. Decomposing the nickel complex with dilute acetic acid the pure compound I (m.p. 194,–195°C) was obtained. This transformation sequence proved to be useful for the determination of the aldehyde contained in the crude product (by estimating the nickel content) and at the same time for the purification of the compound.



FUCHS, Oszhar

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HUNGARY / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60970.

Author : Miklos Kraut, Lajos Toldy, Endre Kasztreiner, Oszhar Fuchs, Laszlo Vargha.

Inst :

Title : Study in Region of Antihistamine Preparations. I. Preparation of Substituted Amines and Their Reduction with $LiAlH_4$.

Orig Pub: Magyar kem. folyoirat, 1957, 63, No 1, 1-5.

Abstract: With a view to study the physiological activity, $RR'NCH_2CON(CH_3)_2$-s, in which R' = α-pyridyl, R = $C_6H_5CH_2$ (I), R = n-$CH_3OC_6H_4CH_2$(II), R = n-

Card 1/7

HUNGARY / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60970.

Abstract: $ClC_6H_4CH_2$ (III), were prepared by the condensation of corresponding RR'NH, in which R' = α-pyridyl, R = $C_6H_5CH_2$ (IV), R = n-$CH_3OC_6H_4CH_2$ (V), and R = = n-$ClC_6H_4CH_2$ (VI), with N-dimethylamide of chloroacetic acid (VII). Dimethylamide of 2-phenyl-2-(α-pyridyl)-propionic acid (IX) was prepared by the condensation of 2-benzylpyridine (VIII) with VII in the presence of $NaNH_2$. The preparation of 1-phenyl-1-(α-pyridyl)-3-dimethylaminopropanone-2 (XI) by the condensation of 2-BrC_5H_4N with $C_6H_5CH_2COCH_2N(CH_3)_2$ (X) did not succeed. I, II, III and IX were reduced with $LiAlH_4$ to $R'RCHCH_2CH_2N(CH_3)_2$, where R' = α-pyridyl, R = = $C_6H_5CH_2$ (XII), R = n-$CH_3OC_6H_4CH_2$ (XIII), R =

Card 2/7

HUNGARY / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60970.

Abstract: = n-ClC6H4CH2 (XIV), and R = C6H5 (XV). 0.4 mole of IV in 1080 ml of absolute toluene is added to 0.85 mole of 77%-ual $NaNH_2$ in 136 ml of absolute toluene in the duration of 2 hours, after that 0.8 mole of VII is added and, after aging (4 hours, 35°), the mixture is filtered and the residue is triturated with 60 ml of absolute alcohol, I is obtained, yield 22.2% melting point 99 to 101° (from absolute alcohol). II and III are prepared similarly of V and VI correspondingly (the amounts of $NaNH_2$ in moles, the amounts of toluene in ml, the amounts of V or VI in moles, the amounts of toluene in ml, the amounts of VII in moles, the

Card 3/7

HUNGARY / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60970.

Abstract: aging duration in minutes at the temperature in °C, the yield in %% and the melting points in °C are enumerated in the following): 0.185, 30, 9.085, 420, 0.17, 60, 35, 12.4, 119 to 120 (from acetone); 0.093, 11, 0.034, 160, 0.68, 70, 35, 25.2, 158 (from absolute alcohol). 0.206 mole of IV is added to 0.27 mole of 77%-ual $NaNH_2$ in 65 ml of absolute toluene at 60°, the mixture is kept 2 hours at 100° until the separation of NH_3 discontinues, then 0.288 mole of VII is added at 70°, and 5 hours later (at 100 to 150°) 60 ml of water is added for the elimination of IV (1 g). The mixture is washed with 5 n. HCl and acid extracts are extracted with ether for the separation of IV (20 g). The residue is alkalized, the resin is separated with 50 ml of $CHCl_3$, and 15 g of NaOH is added too; 7 g

Card 4/7

HUNGARY / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60970.

Abstract: of Na salt of N-benzyl-N-(2-pyridyl)-glycine precipitates, melting point 296° (from alcohol). 0.242 mole of VIII is added to $NaNH_2$ in liquid NH_3, 2 hours later 0.3 mole of VII in 200 ml of absolute ether is added, 1 hour after it 200 ml of water is added and IX is extracted with ether, yield 43%, boiling point 180 to 185°/0.5 mm, melting point 95 to 96° (ether + petroleum ether). XII, XIII, XIV and XV were prepared reducing I, II, III and IX correspondingly with $LiAlH_4$ (the duration of boiling, the yield in %% and the boiling points in °C are enumerated in the following): 24, 50, 185 to 195/1.7 mm, hydrochloride, melting

Card 5/7

HUNGARY / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60970.

Abstract: point 187 to 188°; 20, 50, 185 to 190/2 mm, picrate, melting point 165 to 167° (dissociates); 5, 70, 154 to 155/0.2 mm, hydrochloride, melting point 172 to 174°; 20, 63.5, 142 to 145/3 to 4 mm, oxalate, melting point 151 to 152°. 0.385 mole of benzylcyanide and 0.385 mole of ethyl ester of VII are added to sodium alcoholate (8.85 g of Na and 110 ml of absolute alcohol) and after 3 hours of boiling, 400 ml of water is added first, and after that, 40 ml of glacial CH_3COOH is added; $C_6H_5CH(CN)COCH_2N(CH_3)_2$ (XVI) is obtained, yield 72%, melting point 237 to 238° (dissociates, from alcohol). 33.15 g of X is obtained by the action of 28 ml of concentrated H_2SO_4 and 50 ml of water on 50 g of XVI (2.5 hours at 120 to 127°) with a following addition of 90 ml of 50%-ual KOH, yield

Card 6/7

HUNGARY / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60970.

Abstract: 75.5%, boiling point 91 to 95°/3 mm; oxalate, melting point 144 to 146°; semicarbazone, melting point 223° (dissociates). 59.7 go of VIII is added to phenyllithium (4.98 g and 56.7 g of bromobenzene) in 180 ml of absolute ether. Half an hour later 15.15 g of VII is added, the mixture is boiled 4 hours, 300 ml of water is added, and after extraction with ether, 25.1 g of VIII, boiling point 170°/5 to 6 mm, is distilled off; the residue is treated with 200 ml of 1.5 n. HCl and 35.23 g of XI is obtained after alkalization; oxalate, melting point 176 to 177° (dissociates).

Card:7/7

Fuchs, O.

HUNGARY / Organic Chemistry. Synthesis. G

Abs Jour: Ref Zhur-Khimiya, No 7, 1959, 23402

Author : I: Kraut, M.; Toldy, L.; Kasztreiner, E.; Fuchs, O.; Vargha, L.
II. Toldy, L.; Kraut, M.; Vargha, L.
Inst : Academy of Sciences, Hungary
Title : Investigations in the Field of Antihistamines. I. Preparation of Substituted Acid Amides and Their Reduction by Lithium Aluminium Hydride. II. Simple New Synthesis of Ethylenediamine Derivatives.

Orig Pub: Acta chim. Acad. scient. hung., 1958, 15, No 1, 19-25; No 3, 265-271.

Abstract: See RZhKhim, 1958, 60970; 1959, 4719.

Card 1/1

HAJOS, Andor (Budapest); FUCHS, Oszkar (Budapest)

Application of complexes of metal hydrides in pharmaceutical chemistry. I. Selective reduction of steroid ketones by calcium boron hydride. Kem.tud.kozl.MTA 12 no.3:279-283 '59. (KRAI 9:4)

1. Gyogyszeripari Kutato Intezet, Budapest.
(Chemistry, Medical and Pharmaceutical) (Complex compounds)
(Steroids) (Ketones) (Calcium borohydrides)
(Metals) (Hydrides)

HAJOS, Andor (Budapest); FUCHS, Oszkar (Budapest)

Application of metal hydride in pharmaceutical chemistry. I. Selective reduction of steroid ketones with calcium boron hydride. In German. Acta chimica Hung. 21 no.2:137-142 '59. (MRAI 9:4)

1. Research Institute of Pharmaceutical Industry, Budapest.
(Metals) (Hydrides) (Complex compounds) (Chemistry, Medical and pharmaceutical) (Reduction) (Calcium borohydrides) (Ketones) (Steroids)

HAJOS, Andor (Budapest VII Rottenbiller u.26); FUCHS, Oszkar (Budapest VII, Rottenbiller u.26)

Studies in the field of chloramphenicol. X. Production of chloramphenicol from L_s(+)-threo-β-p-nitrophenilserine-n-butylester. Acta chimica Hung 24 no.4:411-419 '60. (EEAI 10:4)

1. Research Institute of the Pharmaceutical Industry, Budapest.
(Chloramphenicol) (Nitrophenylserine) (Butyl group)
(Esters) (Calcium borohydrides) (Sodium cyanide)
(Hydrolysis)

DOBROWOLSKA, Halina; przy wspolpracy techn.: FUCHS, R.; CACKOWSKIEJ, G.; GORZKOWSKIEJ, T.

Studies on the immunizing activity of a bivalent oral vaccine prepared from Koprowski's strains CHAT (type 1) and Fox (type 3). Przegl. epidem. 15 no.3:257-264 '61.

1. Z Zakladu Wirusologii PZH Kierownik: prof. dr F.Przesmycki.
(POLIOMYELITIS immunol) (VACCINATION)

ANDRZEJEWSKI, J.; DOMZAL, T.; FUCHS, R.; LACINSKI, S.; NIEZGODA, T.; SWIETLIK, M.; SILKA, S.; STRAMSKI, A.; ZELUDZIEWICZ, J.; TERAJEWICZ, A.

Amputations in hospitals of the Olszytn Region during the decade of 1950-1059. Chir. narz. ruchu ortop. polska 26 no.6:797-799 '61.

1. Z Oddzialow Chirurgicznych Szpitali w Olsztynie oraz Szpitali Powiatowych w Gizycku, Ketrzynie Nowym Miescie, Ostrodzie, Szczytnie. (AMPUTATION statist)

FUCHS, Vladimir

KAMINEK, Zdenek, MUDr (Brandys n Lab., Riegrova 1251); FUCHS, Vladimir, MUDr (Praha II., Porici 22)

Poliomyelitis in pregnancy. Lek. listy, Brno 9 no.23:538-540 1 Dec 54.

1. Z gynekologicko-porodnicke kliniky VLA v Hradci Kralove. Z infekcni kliniky VLA v Hradci Kralove.
(PREGNANCY, complications, polio.)
(POLIOMYELITIS, in pregnancy,)

728. FURTHER EXPERIENCES WITH THE TOXOPLASMIN-TEST IN OBSTETRICS - Další zkušenosti s toxoplasminovým testem v porodnictví - Fuchs V. III. Por. Klin. KU, Praha - ČSL. GYNAEK. 1957, 7 (523-526) Tables 3

The past histories - general and obstetrical - of 750 women who were subjected to Frenkel's intradermal toxoplasmin test during the puerperium were studied. One third of the women were positive. The well-known increasing frequency of positivity with age, and the higher incidence of positivity in the rural population could be confirmed. A few theses which so far had only been stated but not proved, could be verified: a higher percentage of positivity in medical personnel, a higher incidence of abortions, premature and stillbirths, and malformations in positive women, especially in the last pregnancy, a predominance of cerebral malformations. The following new points are advanced: no correlation between toxo-positivity and rh-factor, no correlation between toxopositivity and trichomonas-vaginitis, a higher past morbidity from infectious disease in positive women, twice as many pathological pregnancies and operative deliveries in positive women as compared with negative, no difference in the duration of the first and second stages of labour. The author concludes that latent toxoplasmosis of the mother may influence the pregnancy and, especially, the child.

Rohan - Valašské Meziříčí (X, L)

CERNY, Ludek; FUCHS, Vladimir; JIRA, J.J.; BOZDECH, V.

Congenital damages of the central nervous system in children related to latent toxoplasmosis in mothers. Cesk.psychiat. 56 no.2:85-94 Ap '60.

1. Detske oddeleni psychiatricke kliniky KU v Praze. Detska psychiatricka ambulance fakultni polikliniky v Praze. Katedra pro porodnictvi, gynekologii dospelych a deti pediatricke fakulty KU v Praze.

(TOXOPLASMOSIS in pregn.)
(PREGNANCY compl.)
(MENTAL DEFICIENCY etiol.)

CHMELIK, V., C.Se.; ZALOUDEK, M.; FUCHS, Vl.; HRAZDIL, K.

Surgical therapy of the cervix uteri in discharges. Cesk. gyn. 26[40] no.4:271-274 '61.

(CERVICITIS surg) (LEUKORRHEA surg)

FUCHS, Vladimir; JIROVEC, Otto; JIRA, Jindrich; BOZDECH, Vaclav; Matematicko-statisticka spoluprace: prom. mat. V. Kubenkova

Diagnostic toxoplasmosis reactions in normal obstetric subjects. I. Frequency of toxoplasmin test and its relation to the age and occupation and the relationship between skin tests and complement fixation reactions. Cas.lek.cesk 100 no.26:823-826 30 Je '61.

1. III. porodnicka klinika fakulty detskeho lekarstvi Karlovy university, prednosta prof. MUDr. R. Peter. Protozoologicka laborator Cs. akademie ved, prednosta akademik O. Jirovec. Serologicka laborator neurologicke kliniky St. fakultni nemocnice v Praze 2, prednosta akademik K. Henner. 2.Vyzkumny ustav organizace zdravotnictvi, Praha. (for Kubenkova).

(TOXOPLASMOSIS in pregn) (PREGNANCY compl)

TRNKA, V., doc., CSc.; FUCHS, Vl.; SISTEK, J.

Estrogens and carcinoma of the endometrium. Cesk. gynek. 27 no.3: 168-172 Ap '62.

1. Gyn. por. klin. fak. det. lek. KU v Praze, prednosta prof. MUDr. R. Peter.

(UTERUS NEOPLASMS etiol) (ESTROGENS toxicol)

FUCHS, Vladimir; JIROVEC, Otto; BOZDECH, Vaclav; JIRA, Jindrich; Matematicko-statisticka spoluprace: prom. mat. KUBENKOVA, V.

Diagnostic reaction for toxoplasmosis in a normal sampling of the population. II. Diagnostic reaction and pathological phenomena in pregnancy and labor in relation to a positive reaction. Cas. Lek. Cesk. 101 no.14:427-434 6 Ap '62.

1. III porodnicka klinika fakulty detskeho lekarstvi KU v Praze, prednosta prof. dr. R. Peter. Protozoologicka laborator Cs. akademie ved, prednosta akademik O Jirovec. Serologicka laborator neurologicke kliniky KU v Praze 2, prednosta akademik K. Henner. Vyzkumny ustav organizace zdravotnictvi, Praha, prednosta prof. dr. V. Prosek.

(PREGNANCY complications) (TOXOPLASMOSIS in pregn)